

UNIVERSITI TEKNOLOGI MARA

**KNOWLEDGE, ATTITUDE AND
PERCEIVED PRACTICE OF ASTHMA
AMONG URBAN COMMUNITY
PHARMACISTS IN SELANGOR,
MALAYSIA AND LAHORE, PAKISTAN**

WAQAS AKRAM

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of the requirement for the degree of
Master of Science

Faculty of Pharmacy

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CONFIRMATION BY PANEL OF EXAMINERS

I certify that a panel of examiners has met on 12th March 2015 to conduct the final examination of Waqas Akram on his Master of Science thesis entitled “Knowledge, Attitude and Perceived Practice of Asthma Among Urban Community Pharmacists in Selangor, Malaysia and Lahore, Pakistan” in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The panel of Examiners was as follows:

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Community pharmacists play a significant role in the proper management of asthma because of their unique position and extended roles in the community as a healthcare team member. Hence, knowledge, attitude and perceived practice (KAPP) of asthma among community pharmacists can influence the effectiveness of the treatment. This study was conducted to determine KAPP of asthma among urban community pharmacists in Selangor, Malaysia, and Lahore, Pakistan. The aim of the study was to investigate the differences in the scores of KAPP of asthma among urban community pharmacists in two different states and countries, to determine the correlation of knowledge of asthma with attitude and perceived practice of asthma, and to determine the predictors and their effects that lead to different level of KAPP of asthma among urban community pharmacists in two different states and countries. In this cross-sectional study, 150 urban community pharmacists were recruited from Selangor, Malaysia, and 170 from Lahore, Pakistan, via a convenience sampling design. The self-administered instruments were disseminated directly to the consented respondents. The instrument consisted of socio-demographic data, knowledge ($n = 23$ items), attitude ($n = 10$ items) and perceived practice ($n = 22$ items) of asthma. Similar findings as in pilot study, the instrument used in this study was found to be valid ((modern test theory (MTT) (Rasch-Model) and classical test theory (CTT) (factor analysis)) and reliable (MTT (Rasch-Model) and CTT (internal consistency)). The level of asthma knowledge among Malaysian urban community pharmacists was moderate ($M = 12.93$, $\pm SD = 3.46$) and significantly lower than those scored by Pakistani urban community pharmacists ($M = 15.35$, $\pm SD = 2.78$). Overall the level of attitude toward asthma was good, significant ($p = 0.00$) higher with mean ($\pm SD$) score of $45.26 (\pm 3.25)$ obtained by Malaysian than that obtained by Pakistani pharmacists ($36.30 (\pm 1.32)$). The mean ($\pm SD$) score of perceived practice of asthma among Malaysian urban community pharmacists was $99.29 (\pm 4.58)$ that indicated very good perceived practice of asthma but in Lahore, Pakistan, the mean ($\pm SD$) score of perceived practice of asthma was significantly ($p = 0.00$) lower ($79.77 (\pm 3.21)$) but still at a good level. Statistical significant mean differences ($p < 0.05$) were found in the KAPP of asthma scores for age, education level and number of working hours in all respondents. Overall, the correlation between knowledge and attitude, knowledge and perceived practice, and attitude and perceived practice of asthma was significantly ($p < 0.05$) positive moderate ($r = 0.306$) negative moderate ($r = -0.366$), and positive high ($r = 0.919$), respectively. Multiple Regression analysis showed that the selected study predictors insignificantly explained 7.4%, 3.8%, 8.5% of variation in the KAPP of asthma in all respondents, respectively. Logistic regression showed that none of the selected study variables predicted KAPP of asthma among community pharmacists in both states and countries. Interestingly, overall, age, education level and number of working hours had significant effect on the attitude and perceived practice of asthma management. Community pharmacists identified time and patient related factors as the major barriers to the provision of asthma services. In Malaysia, knowledge of asthma among urban community pharmacists needs to be enhanced whereas in Pakistan, urban community pharmacists need to improve in KAPP of asthma to fulfil their current role for better management of asthma. Therefore, attendance to continuous asthma education programmes would benefited community pharmacists in providing excellence pharmaceutical care to asthma patients.

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